

REMARKS

Upon entry of the present amendment, various of the claims will have been amended while claims 4 and 42 will have been canceled without prejudice or disclaimer. Additionally, claim 36 will have been canceled and the subject matter thereof (as amended) will have been resubmitted for consideration as claim 45 so as to enhance clarity and readability.

Additionally, by the present response, various drawing figures will have been amended by including the label "Prior Art" therein.

In view of the hereincontained amendments and the following remarks, Applicants respectfully request reconsideration and withdrawal of each of the outstanding objections and rejections set forth in the above-mentioned Official Action. Such action is respectfully requested and is now believed to be appropriate and proper.

Initially, the Examiner required Figures 1-8 to be designated by a legend such as ---Prior Art---. The Examiner asserted that these drawings illustrate only that which is old.

Applicants respectfully traverse the Examiner's assertion. In particular, Applicants note that Figures 1, 2a, 6 and 8 do not disclose "only that which is old". In this regard, the Examiner's attention is respectfully directed to the brief description of the drawings with respect to Figures 1, 2a, 6 and 8. These figures show features of the present invention, in addition to features included in the prior art.

Accordingly, Applicants have amended the remaining figures (of Figures 1-8) to include the legend "Prior Art". Thus, Applicants respectfully request that the Examiner reconsider and withdraw the requirement for labeling all of Figures 1-8 as prior art.

Further, Applicants respectfully thank the Examiner for considering the arguments presented in the "Response to Examiner's Indication of Non-Responsive Reply" filed on October

10, 2006, as well as for withdrawing the asserted provisional obviousness type double patenting rejection set forth in the previous Official Action.

Moreover, in the Office communication dated September 7, 2006, the Examiner asserted that since this application has been granted special status under the accelerated examination program, no extensions of time under 37 C.F.R. § 1.136(a) will be permitted.

While Applicants' response to the above-noted communication was filed without requiring an extension of time, Applicants wish to correct and complete the record in the present application and respectfully submit that the present application has not been granted special status under the accelerated examination program. In particular, Applicants did not request entry into the accelerated examination program by filing a petition or any other paper and entry into such program has not been granted in the present application.

In the outstanding Official Action, the Examiner rejected claims 1-31 and 35-44 under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner asserted that these claims failed to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Regarding claim 1, the Examiner asserted that the method recited does not correspond to the title (i.e., preamble) of the claim. By the present response, Applicants have amended claim 1 so that the body of the claim recites a method that corresponds to the title/preamble.

Regarding claim 35, the Examiner suggested changing the term "coding" to ---decoding---. By the present response, Applicants have so amended the claim. Additionally, the Examiner asserted that the claim lacks a correlation between a channel decoder orthogonal code hopping pattern generator and an orthogonal code generator. By the present amendments to

claim 35, the relationship and correlation between the various recited components has been more fully set forth.

With regard to claim 36, the Examiner asserted that the term “based on orthogonal code hopping” is vague and indefinite. By the present response, claim 36 has been canceled and the subject matter thereof resubmitted as new claim 45. New claim 45 has been amended to, *inter alia*, eliminate the indefiniteness noted by the Examiner.

Accordingly, Applicants respectfully submit that, particularly in view of the hereincontained amendments, each of claims 1, 35 and 36 are now in full compliance with 35 U.S.C. § 112, second paragraph, and that any previous basis for the rejection of these claims based upon any indefiniteness in claim language has now been eliminated. Accordingly, reconsideration and withdrawal of the outstanding rejection of the claims in the present application under 35 U.S.C. § 112, second paragraph, is respectfully requested and is now believed to be appropriate and proper.

In the outstanding Official Action, the Examiner rejected claims 1-12, 14-21, 28-31, 35-37 and 39 under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art on pages 2-14 (Figures 1-8) of the specification in view of DENT et al. (U.S. Patent No. 5,771,288). Applicants respectfully traverses the above rejection and submit that it is inappropriate and improper.

In particular, neither of the references relied upon by the Examiner, nor any proper combination of these references, discloses the combination of features recited in each of Applicants' claims. Accordingly, reconsideration of the outstanding rejection together with an indication of the allowability of all the claims pending in the present application is respectfully requested and is now believed to be appropriate and proper.

In particular, Applicants' invention, utilizing the combination of claim 1 as a nonlimiting example, is directed to a method for orthogonal code hopping multiplexing communications in spread spectrum communication systems. In particular, the method comprises performing statistical multiplexing for communication channels from a primary communication station to secondary communication stations by using orthogonal code hopping multiplexing and controlling the transmission of spread data symbols from the primary communication station based on the result of collision comparison performed within the primary communication station.

The prior art asserted by the Examiner does not disclose, teach or render obvious the above-noted combination of features. DENT et al. relates to a multiple access coding for a radio communications and particularly relates to a two-tier ciphering system to ensure security at the cellular system level and privacy at the individual mobile subscriber level. At the system level, a pseudo-randomly generated code key is used to select one of the scrambling masks common to all of the mobile stations in a particular cell. At the subscriber level, a pseudo-randomly generated ciphering key enciphers individual information signals before the scrambling operation.

Further, claim 1 of DENT et al. relates a Walsh type modulation such as might be used in the uplink of IS 95 system proposed by QUALCOM. Walsh modulation is performed based on the data being transmitted. In other words, the hopped Walsh (or Walsh-Hadamard) words are dependent upon the data being transmitted, as is apparent from claim 1 of DENT et al. In direct contrast, the present invention is not related to ciphering but to statistical multiplexing based on orthogonal code hopping multiplexing of communication channels from a primary communication station to the related secondary communication stations. In addition, the hopped orthogonal codewords according to the teachings of the present invention are not dependent on

data being transmitted. Rather, the hopped orthogonal codewords are based on the orthogonal code hopping patterns which can be generated based on an identifier of the secondary communication station, such as the electronic serial number (ESN).

In the prior art cited by the Examiner, there is no disclosure related to statistical multiplexing and controlling the transmission of spread data symbols from the primary communication station based on the result of collision comparison performed within the primary communication station as recited in the presently amended claim 1. Accordingly, Applicants' claims are clearly patentable over the references cited by the Examiner.

In setting forth the rejection, the Examiner acknowledges that the admitted prior art fails to disclose that the code generator is orthogonal code hopping and relies on DENT et al. to disclose a multiple access coding for radio communications that discloses orthogonal code hopping. However, as previously noted, DENT et al. does not disclose control of the transmission of spread data signals from the primary communication station based on the result of collision comparison performed within the primary communication station, as recited in the claimed combination of claim 1. Thus, claim 1 is clearly patentable over any proper combination of the admitted prior art and DENT et al.

In the outstanding Official Action, claims 13, 22 and 23-27 were objected to as being dependent upon a rejected base claim but were otherwise indicated to be allowable if rewritten into independent form including all of the limitations of the base claim and any intervening claims. Applicants appreciate the Examiner indication of allowable subject matter in these claims. However, in view of the reasons set forth for the allowability of claim 1 above, Applicants' respectfully decline to rewrite these claims into independent form at the present time.

In the outstanding Official Action, the Examiner indicated claims 32-44 as being allowed and additionally indicated that claims 35-44 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. § 112, second paragraph.

By the present response, and as noted above, the rejection under 35 U.S.C. § 112, second paragraph, has been overcome. Moreover, claim 36 has been rewritten as claim 45. Independent claims 32 and 36 have been amended to enhance clarity and to recite further features of Applicants' invention. Nevertheless, at least based on the reasons for the Examiner's indication that these claims would be allowable or are allowed, it is respectfully submitted that claims 32 and 45, as well as those claims dependent thereon, are clearly patentable over the prior art of record. Accordingly, an action to such effect is respectfully requested, in due course.

Each of the dependent claims is submitted to be patentable based upon their own respective recitations as well as based upon their depending from a shown to be allowable base claim.

Accordingly, Applicants respectfully reconsideration of all the outstanding rejections together with an indication of the allowability of all of claims 1-3, 5-35 and 37-41 and 43-45, in due course.

SUMMARY AND CONCLUSION

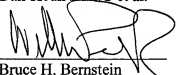
Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so. Applicants have amended various claims to enhance clarity. Applicants have also labeled several of the drawings as prior art in accordance with the Examiner's requirement and have traversed the Examiner's requirement with respect to the labeling of others of the drawings.

Applicants have discussed the outstanding rejections in the present application and have overcome the Examiner's rejection under 35 U.S.C. § 112, second paragraph, by amending the claims. Applicants have traversed the Examiner's rejection of claim 1 and various claims dependent thereon. In particular, Applicants have discussed the disclosure of the references relied upon by the Examiner and noted the significant and substantial shortcomings thereof with respect to the combination of features recited in Applicants' claims. Accordingly, Applicants have provided a clear evidentiary basis supporting the patentability of all the claims in the present application and respectfully request an indication to such effect, in due course.

Any amendments to the claims which have been made in this response, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attached thereto.

Should the Examiner have any questions concerning this Reply or the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,
Dan-Keun SLING et al.



Bruce H. Bernstein
Reg. No. 29,027

William Pieprz
Reg. No. 33,630

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GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191